

201-14503



NCIC HPV

Sent by: Mary-Beth
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To: NCIC HPV, moran.matthew@epa.gov

cc:

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Subject: Environmental Defense comments on Methyl 3,3-dimethyl-4,
pentenoate (CAS# 63721-05-1)



Richard_Denison@environmentaldefense.org on 05/27/2003 11:38:07 AM

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Subject: Environmental Defense comments on Methyl 3,3-dimethyl-4, pentenoate (CAS# 63721-05-1)

(Submitted via Internet 5/27/03 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov,
boswell.karen@epa.gov, chem.rtk@epa.gov, lucierg@msn.com and
NATALIE RUTHERFORD@fmc.com)

Environmental Defense appreciates this opportunity to submit comments on
the robust summary/test plan for Methyl 3,3-dimethyl-4, pentenoate (CAS#
63721-05-1).

This test plan and robust summary for methyl 3,3-dimethyl-4, pentenoate,
also referred to as DVester Step 1, was prepared by FMC Corporation. The
test plan is one page long and not very informative, indicating via a
checklist only whether or not there are available data for a particular HPV
endpoint and whether additional testing is required.

The sponsor claims that no DVester Step 1 is present in any consumer
products, but does not share any information as to which consumer products
the chemical is used to synthesize. Therefore, we cannot evaluate the
potential for human exposure. The sponsor also claims that DVester Step 1
is used entirely as a closed-system intermediate. However, the robust
summary indicates that wastewater monitoring samples contain an average of
1.55 ppm and in-house monitoring data revealed that some facilities had
approximately 1 ppm in the air. Obviously, based on these results, DVester
Step 1 is not entirely a closed-system intermediate and the potential
exists for chronic human exposure. The sponsor also states that DVester is
not currently transported, but that it has been as recently as 2002, so we
must assume that this material will be transported at some time in the
future.

The sponsor appears to have conducted a reasonable evaluation of existing
data and has appropriately noted the cases where data are lacking or
unacceptable for some reason. We agree with all of the proposals for
further testing, but disagree with the sponsor's claim that a repeat dose
study is not needed; we recommend that the sponsor conduct a combined
repeat dose/reproductive/ developmental toxicity screen instead of only a
developmental toxicity screen. Specific comments are as follows:

1. We agree with the sponsor's proposal to conduct studies on
physical/chemical properties, biodegradation, acute toxicity in aquatic
invertebrates, and toxicity in aquatic plants, as this information is
either not available (biodegradation and ecological toxicity) or unreliable
(physicochemical properties).

2. Acute toxicity studies in rats demonstrate that DVester Step 1 has
little acute toxicity.

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3. In vitro genetic toxicity, as assessed by data from Ames tests, suggest that DVester Step1 does not appear to be a mutagen. However, no in vivo studies are available so we concur with the sponsor's proposal to conduct such a test.

4. Since there is apparently some release of DVester environment and no repeat dose data are available, we disagree with the sponsor's claim that repeat dose studies are not needed. In order to minimize the use of animals, we recommend that a combined reproductive/developmental/repeat dose toxicity study be conducted on DVester Step 1.

Thank you for this opportunity to comment.

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